

# Chapter 5. Recommended Transportation Plan

This chapter summarizes the recommended components of the *Connecting Casper 2030* Long Range Transportation Plan. A financial analysis of the potential transportation improvements is included in this chapter.

# 5.1 Roadway Plan

The recommended roadway plan includes committed projects identified in the Casper MPO Transportation Improvement Program (FY 2007 to FY 2009) and the WYDOT State Transportation Improvement Program (FY 2007 and FY 2012). Additional projects, or future projects beyond 2012, have also been identified to address future year transportation needs throughout the Casper MPA. The following summarizes projected revenues and estimated project costs to the year 2030 and outlines the fiscally constrained roadway improvements.

# **5.1.1 Funding Analysis**

As part of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), Congress enacted fiscal constraint requirements that apply to the TIP, STIP, and LRTP. This fiscal constraint requires that revenues in transportation planning and programming are identified and "are reasonably expected to be available" to implement the identified improvements. Federal law states that long range transportation plans shall:

Include a financial plan that demonstrates the consistence of proposed transportation investments with already available and projected sources of revenue. The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan. The estimated revenue by existing revenue source (local, State, Federal, or private) available for transportation projects shall be determined and any shortfalls identified. Proposed new revenues and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues shall cover all forecasted capital, operating, and maintenance costs. All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends.



# **Projected Revenues**

Funding for the Casper MPA transportation maintenance and improvement projects comes from a variety of Federal, State, local and private sources. The Federal government is the primary funding source for transportation systems in the United States. These funds come from federally assessed user fees and motor fuel taxes which are apportioned back to the states on a formula basis. The primary source of revenue at the Federal and State levels includes motor fuel taxes, vehicle registration fees, and special motor carrier fees. Finance at the county and municipal levels are primarily based on property taxes, sales taxes, and special assessments. The private sector, including developers, often supports transportation improvements through impact fees, right-of-way donations, and cost sharing arrangements.

Table 5-1 displays the estimated roadway revenues for the years 2007 through 2030 for the Casper MPA. The future year revenues are based on recent funding levels and WYDOT projections. The fuel revenue projections for the City of Casper, Towns of Mills, Evansville, and Bar Nunn, and Natrona County were provided by WYDOT for FY 2007 through FY 2010. While it is likely that these funding levels will continue to increase beyond 2010, for the purpose of the LRTP financial analysis all projected funding levels beyond the year 2010 are kept at current levels. Keeping these funding levels constant through the year 2030 allows the projected revenues to be compared to the roadway improvements costs that are presented in year 2006 dollars.

With these assumptions, it is estimated that approximately \$537 million would be available for the Casper MPA for roadway maintenance and improvements to the year 2030. Of this total, a significant percentage will be dedicated to the maintenance of the existing transportation infrastructure including bridges, pavement, traffic signals, traffic signs, and other improvements. Table 5-1 displays the estimated percentage of each funding source that would be available for new construction with the remaining percentage generally assumed to be used for the on-going maintenance and preservation of the existing roadway system. In total, it is estimated that approximately \$96 million would be available between 2013 and 2030 for new roadway construction.



Table 5-1. Projected Revenues (2007 to 2030)

					F	uel Revenue 4			Gas/Coal 5	
Year	STPU 1	STIP 2	1% Tax <sup>3</sup>	Casper	Mills	Evansville	Bar Nunn	Natrona County	Natrona County	Tota
2005	n/a	n/a \$	15,000,000 \$	990,577 \$	54,326 \$	87,769	\$ 10,014	n/a	n/a	n/
2006 \$	1,077,701 \$	1,182,000 \$	15,000,000	n/a	n/a	n/a	n/a	n/a	n/a	n/
2007 \$	1,077,701 \$	669,000 \$	15,000,000 \$	1,040,280 \$	66,809 \$	96,295	\$ 10,014 \$	804,792	\$ 659,229	\$ 19,424,12
2008 \$	1,077,701 \$	22,581,000 \$	15,000,000 \$	1,052,430 \$	67,458 \$	97,139	\$ 10,589 \$	819,215	\$ 661,030	\$ 41,366,56
2009 \$	1,077,701 \$	24,847,000 \$	15,000,000 \$	1,064,579 \$	68,108 \$	97,984	\$ 10,773 \$	833,639	\$ 662,830	\$ 43,662,61
2010 \$	1,077,701 \$	275,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 19,120,66
2011 \$	1,077,701 \$	5,818,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 24,663,66
2012 \$	1,077,701 \$	11,600,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 30,445,66
Subtotal (2007 - 2012) \$	6,466,206 \$	65,790,000 \$	90,000,000 \$	6,387,476 \$	408,649 \$	587,902	\$ 64,244 \$	5,001,835	\$ 3,976,982	\$ 178,683,29
2013 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,66
2014 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2015 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2016 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2017 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2018 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2019 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2020 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2021 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2022 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2023 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
2024 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,60
2025 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
2026 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
2027 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
2028 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
2029 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
2030 \$	1,077,701 \$	11,000,000 \$	15,000,000 \$	1,076,729 \$	68,758 \$	98,828	\$ 10,956 \$	848,063	\$ 664,631	\$ 29,845,6
Subtotal (2013 - 2030) \$	19,398,618 \$	198,000,000 \$	270,000,000 \$	19,381,122 \$	1,237,644 \$	1,778,904	\$ 197,208 \$	15,265,134	\$ 11,963,358	\$ 537,209,37
Total (2007 to 2030) \$	25,864,824 \$	263,790,000 \$	360,000,000 \$	25,768,598 \$	1,646,293 \$	2,366,806	\$ 261,452 \$	20,266,969	\$ 15,940,340	\$ 715,892,66
oital Improvements (New	Construction)									
Percent Available	100%	20%	10%	20%	20%	20%	20%	20%	20%	n
Total (2013 to 2030) \$	19,398,618 \$	39,600,000 \$	27,000,000 \$	3,876,224 \$	247,529 \$	355,781	\$ 39,442 \$	3,053,027	\$ 2,392,672	\$ 95,963,29

### **Notes and Assumptions:**

- 1) STPU funding is effective through FY 2009. The program will be revaluated by the Wyoming Transportation Committee which has the discretion to continue the program. For this analysis, the year 2007 to 2030 was held consistent to the current funding level.
- 2) STIP funding between 2007 and 2012 averaged approximately \$11 million per year for the Casper MPA which was used to project funding levels between 2013 and 2030.
- 3) Funds from a 1% tax used for roadway improvements. Funding levels for 2007 to 2030 held consistent to approximate year 2006 funding level of \$15 million.
- 4) Fuel Revenue projections for the City of Casper, Towns of Mills, Evansville, and Bar Nunn, and Natrona County were provided by WYDOT for Fiscal Year (FY) 2007 to FY 2010.
- 5) Gas/Coal Severance Tax projections were provided by WYDOT for FY 2007 to FY 2010 for Natrona County.



# **Roadway Improvement Costs**

Specific roadway improvements, along with estimated project costs, are included in the TIP (FY 2007 to FY 2009) and STIP (FY 2007 to FY 2012) for the Casper MPA. The STIP also identifies future year roadway projects that are needed beyond 2012. These projects do not have funding sources identified and are generally included in the STIP because they address a transportation need and so local agencies can pursue funding for a specific project. Including future year projects in the STIP also positions the MPO and local communities to be ready to proceed with a project should additional revenue sources become available.

Additional projects, or planned projects, beyond those included in the TIP and STIP have been identified for the Casper MPA. These projects generally accommodate future year development and/or address transportation deficiencies identified in the LRTP. Many of the planned projects for the Casper MPA have been included in previous LRTP's and the Casper Area Growth Management Plan. General planning cost estimates for these additional projects were presented in Chapter Four.

# Comparison of Projected Revenues and Estimated Project Costs

It is estimated that the TIP and STIP projects for the Casper MPA, between 2007 and 2012, would total approximately \$72 million. The revenue projections for this same time period show approximately \$179 million available to cover both maintenance and construction projects. While the TIP and STIP does not guarantee funding, it is assumed that the TIP and STIP projects could be funded with the remaining revenues between 2007 and 2012 covering the on-going maintenance of the existing roadway infrastructure.

Between 2013 and 2030, assuming no increases over current funding levels, it is estimated that approximately \$538 million would be available to fund maintenance and capital roadway improvements. The majority of these revenues again would be allocated to maintenance with a smaller percentage funding new construction (see Table 5-1 for assumptions). Generally speaking, approximately 80% of the revenues between 2013 and 2030 are assumed to be needed for roadway maintenance. Under this scenario, it is estimated that approximately \$96 million would be available to fund new construction or capital roadway improvements between 2013 and 2030.

The future projects identified in the STIP (projects beyond 2012) total approximately \$85 million leaving approximately \$11 million to fund additional projects. The LRTP identified additional projects for the Casper MPA that total approximately \$95 million leaving a shortage of nearly \$84 million that would be needed to construct all the LRTP roadway projects.

It is important to consider the following when comparing the projected revenues and estimated project costs. First, because it is difficult to identify when a project will be constructed, all revenues and cost estimates beyond 2012 assume no significant increases in funding or project costs. Second, since specific details regarding design, engineering, right-of-way, and construction costs are not available for the planned projects, the project



costs represent a general planning level cost estimate. As projects proceed to the engineering and design phase, resulting in more detailed cost estimates, the estimates presented in this LRTP should be updated and included in the TIP and STIP. Finally, it is important to understand that even though projects have been identified in the LRTP, TIP, and STIP that this in no way guarantees that all improvements will be constructed. Actual funding for transportation improvements is apportioned each year and therefore funding levels can vary greatly and impact the feasibility and timing of the roadway projects.

# **5.1.2 Priority Roadway Improvements**

Given the projected shortage between revenues and project costs, it is necessary to identify priority roadway improvements as part of the fiscally constrained LRTP. Improvements that enhance safety and reduce congestion are generally the highest priorities and many projects currently in the TIP and STIP address both existing and future year deficiencies. In analyzing the 2030 low growth scenario deficiencies, it was observed that the TIP and STIP projects address the majority of the projected roadway needs within the Casper MPA. Table 5-2 summarizes the priority roadway improvements for the Casper MPA along with the future year deficiency that is addressed. Figure 5-1 displays the location of the priority roadway improvements.

Another concern that needs to be considered is how future year roadway improvements best support new development and growth areas. The northwest portion of the Casper MPA is an example of an area expected to experience growth and development over the next twenty-five years. While many of the roadway improvements in this area are not included as priority roadway improvements as part of the fiscally constrained LRTP, these are still important projects that support residential, commercial, and industrial development. As such, it is important for the Casper MPA to identify new revenue sources to enable the construction of these important infrastructure improvements.

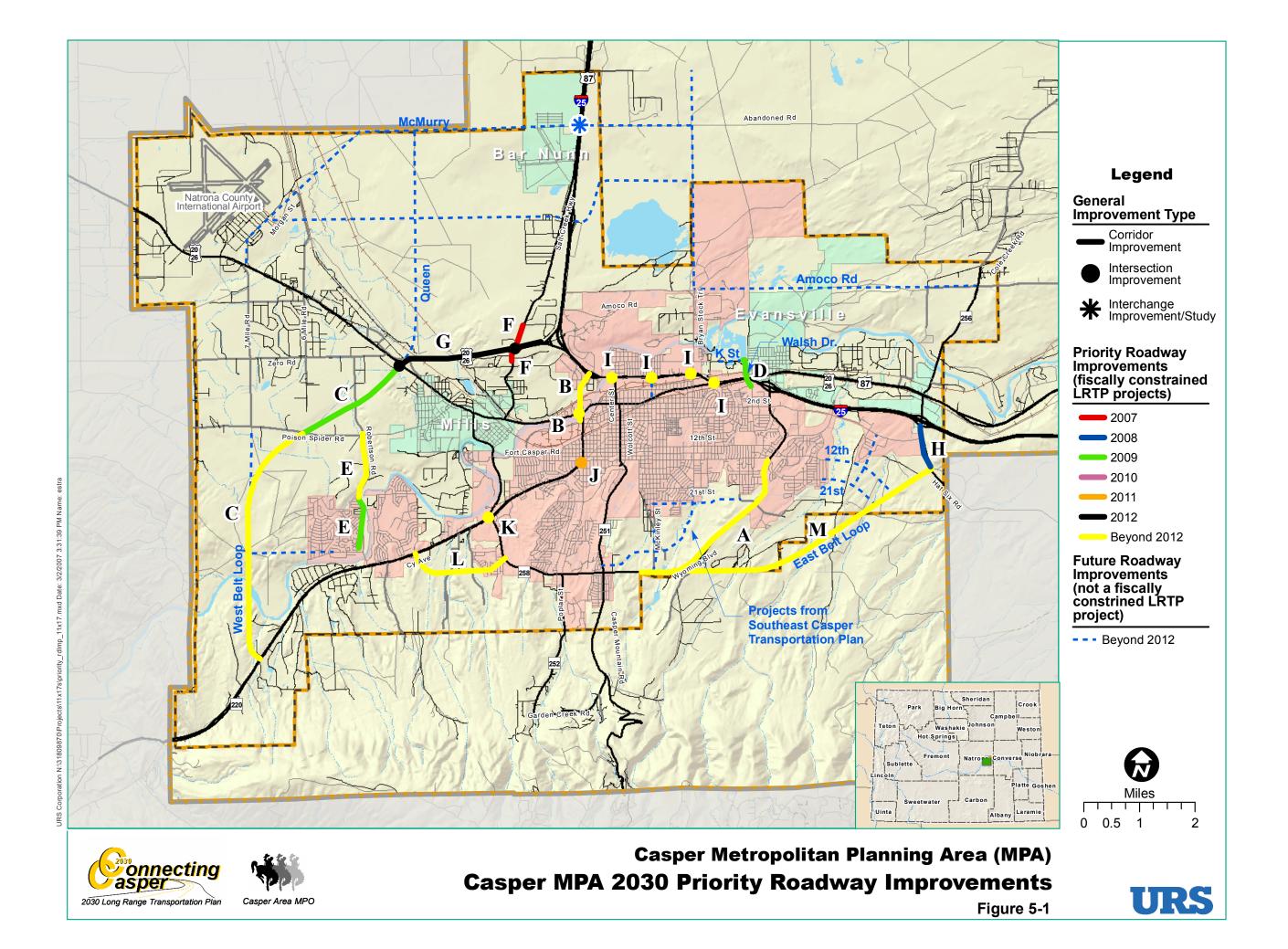
Finally, while the priority roadway improvements identified in this LRTP address regional transportation deficiencies through the year 2030, it is more important to understand that the plan is flexible and capable of responding to change. Over the next twenty-five years the area's demographics will shift, priorities may change, and new technologies will develop. This LRTP, along with future updates of the plan, will help the Casper Area MPO plan for the ever changing dynamics of the regional transportation system. Table 5-3 displays action items that can help the Casper MPA provide the best possible transportation system for all transportation users.



### Table 5-2. Priority Roadway Improvements in Fiscally Constrained LRTP

ID Project	Existing or Future Year Deficiency	Roadway Improvements or Other Comments	Included in TIP or STIP	Cost (\$1,000)
A. Wyoming Boulevard	The existing two-lane section of Wyoming Boulevard, between approximately McKinley Street and 15th Street, is projected to operate over-capacity by the year 2030.	WYDOT has plans to widen this segment to four-lanes which will sufficiently accommodate projected traffic volumes to the year 2030 and will eliminate the projected capacity deficiency. This project will also include resurfacing of Wyoming Boulevard beyond 15th Street north toward 2nd Street.	Beyond 2012	11,275
B. Poplar Street	The Poplar Street corridor, from I-25 to the Platte River, has capacity concerns at the Platte River Bridge and the intersection at 1st Street. This intersection is also one of the top five high accident locations within the Casper MPA.	Improvement plans call for Poplar Street to be widened to five-lanes with the Platte River Bridge to be widened to six-lanes. This will also allow intersection improvements including additional turn lanes at 1st Street. This project addresses future year capacity concerns and should improve traffic safety along the corridor.	Beyond 2012	17,285
C. West Belt Loop	New development in the western portion of the Casper MPA will increase traffic volumes on existing roadways such as CY Avenue, Poplar Street, Robertson Road, and Poison Spider Road.	This project is shown to help reduce traffic levels along existing roadways. This facility also connects major regional and state facilities including connections to CY Avenue, US 20/26, and I-25 helping to improve regional freight movement. This facility also provides a north-south arterial to support future year development on the western fringe of the MPA.	FY 2009 Beyond 2012	20,000 19,300
D. Walsh Drive	There is currently a lack of continuous north-south local roadway connections that crossover the I-25 corridor.	This project provides an additional north-south travel route under I-25. This roadway is projected to carry approximately 8,000 vpd under a low growth scenario and is shown to reduce traffic levels along Wyoming Boulevard ultimately providing capacity, operations, and safety benefits.	FY 2009	736
E. Robertson Road	This roadway requires improvements to accommodate continued growth in the western portion of the Casper MPA.	This project improves roadway geometry to more safely accommodate traffic.	FY 2009 Beyond 2012	2,400 3,000
F. Salt Creek Highway	Future year traffic conditions indicate the need to upgrade Salt Creek Highway to more safely and effectively accommodate future year traffic volumes. Future year volumes also indicate capacity concerns near the	There are plans to improve portions of Salt Creek Highway including widening the interchange to five-lanes at the Shoshoni Connector. This improvement addresses future year capacity concerns at the interchange and would improve access to the Port of Entry	FY 2007 FY 2012	255 2,100
G. Shoshoni Connector	Salt Creek Highway and Shoshoni Connector interchange.  Improvements are needed at the intersection of the Shoshoni Connector and US 20/26 to accommodate a future connection with the planned West Belt Loop.	located just north of the Shoshoni Connector.  This project improves the intersection of the Shoshoni Connector and US 20/26 to accommodate a connection with the West Belt Loop. This project also includes the reconstruction of the Shoshoni Connector to I-25.	FY 2012	9,500
H. Hat Six Road	New development in the eastern portion of the Casper MPA puts pressure on existing roadways.	Plans are to widen Hat Six Road to five-lanes from I-25 south to a potential connection with an East Belt Loop improvement. This project provides an alternative access point to the eastern portion of the Casper MPA and could help reduce future year traffic levels.	FY 2008	2,624
I. I-25 Corridor / Casper Marginal	The I-25 corridor through the Casper MPA has several geometric deficiencies including short acceleration lanes, deceleration lanes, and weaving areas.	This project will improve the geometrics at ramp locations to bring the I-25 ramps up to current design standards. Intelligent Transportation System (ITS) applications along with the reconstruction of the mainline will also be included with the future year improvements.	FY 2008 Beyond 2012	19,781 22,277
J. CY Avenue at Poplar Street	This intersection is currently one of the highest accident locations within the Casper MPA.	Plans call for intersection improvements that would potentially improve traffic operations and traffic safety.	FY 2011	2,818
K. CY Avenue at Wyoming Boulevard	New development in the southwest and western portion of the Casper MPA is expected to significantly increase traffic volumes in the area along CY Avenue causing some segments to operate at-capacity and over-capacity.	Plans include improvements at the intersection of CY Avenue and Wyoming Boulevard but this project is not currently not programmed in the STIP. The addition of right-turn and left-turn lane improvements would address some capacity and safety concerns in the short-term and mid-term.	NO	500
L. CY Ave. and Wyoming Blvd. Connector	New development in the southwest and western portion of the Casper MPA is expected to significantly increase traffic volumes in the area along CY Avenue causing some segments to operate at-capacity and over-capacity.	This project would provide a new connection from CY Avenue and run south of planned developments to connect back to Wyoming Boulevard. This provides an additional local connection that is shown to reduce traffic levels at the CY Avenue and Wyoming Boulevard intersection.	NO	4,000
M. East Belt Loop	New development in the east and southeast portion of the Casper MPA will require the development of additional arterial connections to accommodate this growth.	This project is shown to relieve traffic levels along Wyoming Boulevard as this connection allows traffic to access the Casper area from the I-25/Hat Six Road interchange. This facility also supports anticipated development and could serve as a truck route to remove truck traffic away from the Wyoming Boulevard and I-25 interchange.	NO	13,200

SOURCE: URS Corporation; WYDOT STIP 2007 (FY 2007 to FY 2012); Casper Area MPO TIP (FY 2007 to FY 2009).





# **5.1.3 Funding Shortage**

The fiscally constrained LRTP must be cost-feasible meaning that the region must have available funding sources to pay for the improvements. As is often the case, the transportation needs exceed the available revenues requiring elected officials and transportation experts to make difficult decisions.

There are no easy answers to identify additional revenue sources. Raising taxes and/or user fees are ways to generate additional revenue but are often unpopular with the general public. Currently, Wyoming is one of the lowest states in the Country in terms of gasoline taxes. Raising this tax could generate additional revenue to support the continued maintenance and preservation of the existing transportation infrastructure and could also increase the available funds to construct planned roadway improvements.

The Wyoming Transportation Committee is aware of these funding concerns and is considering alternatives to address this issue. The Transportation Committee could consider a one time increase in transportation funding to address short-term needs or may decide to identify a long-term strategy that would provide a more reliable revenue source. Local communities should work with and encourage the state legislature for increased funding to ensure the implementation of the priority roadway improvements and other planned roadway projects. Furthermore, local officials should continue to work with both State and Federal representatives to pursue federal funding similar to the \$20 million earmarked for the West Belt Loop as part of SAFETEA-LU.

The County and other communities within the Casper MPA may want to consider the adoption of an impact fee program to offset the potential costs associated with development in the Casper MPA. Currently, local agencies work with developers to identify cost sharing arrangements but the implementation of an impact fee program could potentially generate additional revenues that could be used for future roadway improvements.

# G

### Table 5-3. Roadway Action Items

### **General Roadway Improvements**

- 1 Emphasize the on-going maintenance and preservation of existing roadway facilities throughout the Casper MPA. When possible, consider alternatives that accommodate and promote other transportation modes including:
  - a Improvements that enhance access to public transit.
  - Improvements that encourage the development of walkable communities.
  - c Improvements that better accommodate bicyclists.
- 2 Support the implementation of the priority roadway projects identified in Table 5-2 and Figure 5-1.
- 3 Support policies and design standards that maximize the potential benefits of future year roadway improvements.
  - Encourage corridor preservation along planned roadway improvements.
  - Consider increasing corridor right-of-way to provide flexibility that can be used to provide additional capacity and/or better accommodations for bicyclists and transit vehicles.
  - Evaluate a development impact fee program that could generate additional revenue to offset the cost of future year roadway improvements.
  - Encourage the development of continuous arterial roadways in developing areas to best accommodate projected traffic levels.

### **Capacity Issues**

- Emphasize roadway improvements that prioritize low cost strategies to address both existing and future year capacity deficiencies.
- a Promote Transportation System Management (TSM) strategies to improve intersection operations.
  - ▶ Provide turn-lanes to improve traffic flow.
  - Evaluate traffic signal improvements, including ITS strategies, to reduce intersection delay and improve traffic operations along major travel corridors.
- Identify priority corridors for Access Management strategies that preserve roadway capacity and increase travel safety by limiting access points along major corridors.
  - ▶ Poplar Street (recommendations coming from corridor study)
  - CY Avenue
- 2 Prioritize improvements that have shown the potential to relieve traffic congestion throughout the Casper MPA.
  - West Belt Loop
  - Walsh Drive
  - East Belt Loop
  - CY Avenue and Wyoming Boulevard Connector

### Traffic Safety Freight Movement

- 1 Emphasize roadway improvements that enhance and improve overall traffic safety for all transportation system users.
  - Encourage at-grade rail crossing improvements to enhance traffic safety and rail operations.
  - Evaluate the use of Intelligent Transportation System (ITS) applications to improve travel safety.
    - Identify corridors for implementation of signal preemption that prioritizes emergency vehicles.
    - ▶ Consider potential applications within the I-25 corridor.
- 2 Complete traffic studies that address high accident locations and other traffic related concerns.
  - a Study the I-25 corridor through the Casper MPA to address both existing and future year deficiencies.
  - Continue to monitor the traffic operations along the 12th and 13th Street corridor, between CY Avenue and McKinley Street, to slow traffic and increase both traffic and pedestrian safety.

- 1 Emphasize roadway improvements that enhance the movement of freight within and through the Casper MPA.
  - a Study the I-25 corridor through the Casper MPA to identify improvements that would improve traffic operations and improve freight movement through the region.
  - Explore ITS applications to provide traveler information including weather, roadway, and traffic conditions.
  - Identify an alternative travel route to I-25 (such as an Amoco Road extension) that could be used if the interstate were shut down due to accidents, weather, or construction.
  - **b** Designate the West Belt Loop as a primary truck route.
  - Study roadway improvements in the northwest portion of the Casper MPA to improve freight movement to the airport, business and industrial parks, and the Port of Entry.
    - Construct improvements to Salt Creek Highway.
    - Evaluate the benefits of a McMurry Road extension and new I-25 interchange near Bar Nunn.

### **Regional Connectivity**

- Support roadway projects within the Casper MPA that enhance regional connectivity, strengthen the functional classification system, and ultimately improve travel mobility and accessibility for all transportation users.
  - Support the construction of the West Belt Loop which provides a north-south arterial connection in the western portion of the MPA and provides an important regional connection to CY Avenue, US 20/26, and I-25.
  - h Improve local connections to the West Belt Loop including:
    - Robertson Road
    - Poison Spider Road
    - ▶ 7 Mile Road
  - Support the implementation of the recommended Southeast Transportation Plan improvements that enhance roadway connectivity in the area generally bound by McKinley Street, 15th Street, and Wyoming Boulevard.
  - Further evaluate a potential East Belt Loop to support development in the southeast portion of the Casper MPA and improve both regional and local travel connectivity.
  - © Conduct a Northwest Development Area Transportation Study to identify specific transportation needs and to define and preserve the future arterial and collector roadway system. Specific issues to consider include:
    - Define and preserve corridors for the development of the arterial roadway improvements including McMurry Road, Queen Street, and an additional east-west arterial road.
    - Identify appropriate access points and encourage access management to preserve roadway mobility and enhance traffic safety.
    - Evaluate a potential new I-25 interchange in the Bar Nunn area to support projected growth to the year 2030.
    - Evaluate a potential connection with the Shoshoni Connector and a possible north-south extension that would align with the West Belt Loop.
    - Evaluate the accommodation of alternative transportation modes including transit, bicyclists, and pedestrians.
  - Continue to monitor existing roadways to determine if future improvements are needed to strengthen or improve major transportation connections.
    - Monitor the McKinley Street corridor, at Yellowstone Highway, to determine if improvements are needed to eliminate the existing jog and improve traffic operations.

SOURCE: URS Corporatio



# 5.2 Transit Plan

A good public transit system is a vital community resource and an important piece of the regional transportation system. For some, public transit is the only viable transportation mode connecting individuals to employment opportunities, schools, community resources, shopping, and other daily activities. Within the Casper MPA, CATC has been the primary provider of these valuable services for over twenty-five years and in April 2005 expanded operations to include a fixed-route/route deviation system (The BUS) in the City of Casper.

Since The BUS began operation, overall CATC ridership has nearly doubled. During this time the number of individuals using the demand response service has decreased suggesting that some transit users have shifted to the fixed-route service. The fixed-route service has been so well received that the Towns of Mills and Evansville will begin fixed-route service in 2007. The challenge over the next twenty-five years will be to continue to meet the mobility needs of all Casper MPA residents.

It is envisioned that the fixed-route transit service will continue to grow and play a major role in meeting the transit needs of Casper MPA residents. Developing areas in the eastern portion of the Casper MPA, east and southeast of Wyoming Boulevard, could benefit from an extension of the fixed-route service. Areas to the north and northwest, including Bar Nunn, are other areas projected to have significant growth over the next twenty-five years. The environmental justice analysis shows that extending fixed-route transit service to the northwest portion of the MPA would improve access for low income residents.

An aging population is another concern that will place increased pressure on regional transit services. A plan to expand the fixed-route system could potentially reduce demand response service and improve transit operations throughout the Casper MPA. These potential service improvements require well-designed transit routes and accessible stops. CATC should work with local communities to adopt land use policies that encourage the use of public transit. It is important to understand that transit trips generally begin and end with another form of transportation, such as walking or bicycling. Developing walkable communities is important in supporting public transit. People should be able to walk to a bus stop from their homes and to jobs, shopping, and other activities and the trip should be made as seamless as possible. If pedestrians don't feel safe or feel it is too difficult to get to a bus stop, they will choose not to go, or will select another transportation mode. With this in mind, an emphasis should be placed on developing a well-connected non-motorized transportation system throughout the Casper MPA. Convenient connections, via well-maintained sidewalks and/or multi-use pathways, are critical to the use of public transit.



# **5.2.1 Conceptual Transit Improvements**

The implementation of the fixed-route transit service was a significant step forward in the provision of public transportation services within the Casper MPA. The discussion of a potential fixed-route service started in the 1990's and was included in previous LRTPs. These conceptual transit improvements, identified over ten years ago, took years of planning, evaluation, and design before the fixed-route service became a reality in April 2005. Much like the planning effort needed to implement the current fixed-route service, this LRTP sets forth conceptual improvements to grow and expand transit services throughout the Casper MPA over the next twenty-five years.

The conceptual transit improvements are divided into short-term, mid-term, and long-term improvements. Short-term improvements generally include issues that should be addressed over the next five years, mid-term improvements include issues to the year 2020, and long-term improvements range from 2021 to 2030. While these issues are divided into specific time frames, it is important to note that the primary factor in determining if an improvement is feasible is really dictated by the location and intensity of future year development. For example, if the Casper MPA grows according to the high growth rate scenario, many of the mid-term to long-term improvements could be needed well before the identified time frame. If the area grows according to the low growth scenario, it is possible that many improvements will not be needed until closer to the 2030 horizon year.

Table 5-4 summarizes the conceptual improvements while Figure 5-2 displays the location of conceptual improvements. Table 5-5 displays transit action items that support the continued growth and expansion of public transportation services throughout the Casper MPA.



### Table 5-4. Conceptual Transit Improvements

Long-Term **Short-Term** Mid-Term

# **New Service Area** Mills and Evansville

New fixed-route service to Mills and Evansville will begin in 2007. The analysis indicates that these new routes will cover an additional 7% of

### **Weekend Service**

CATC will begin Saturday service for The BUS in July 2007 with the service running from 8 a.m. to 5 p.m.

the Casper MPA population.

### **College Transit Pass**

CATC and Casper College should explore the possibility of a college transit pass for all students, faculty, and staff. A college transit pass would provide all students unlimited access to the fixed-route service and would provide CATC with a reliable revenue source.

#### **System Modifications**

CATC, in conjunction with local communities, should continue to review and monitor existing transit operations to determine if route modifications are needed to better serve Casper MPA residents.

### **Improved Amenities**

Continue to improve transit amenities including providing shelters, benches, etc. at major transit stops. Also, encourage on-going maintenance of non-motorized facilities including sidewalks and trails to provide connections to transit routes.

### **New Service Area** Eastern Portion of MPA

The eastern portion of the MPA. generally east of Wyoming Blvd., is an area currently experiencing residential and commercial development. Fixed-route service does currently extend to the Mall but additional extensions of the service could be needed to accommodate both short-term and long-term growth anticipated in this portion of the Casper MPA.



### **Service Enhancements**

CATC should continue to evaluate the feasibility of providing additional hours of service and expanded weekend service as the. grows.

#### Funding

CATC should continue to support the use of 1% sales tax to help fund transit services and pursue grants and other revenues to continue a high level of service.

### **Equipment Replacement**

CATC will continue to replace equipment as needed to provide reliable service.

### New Service Area Northwest / Bar Nunn Area

The northwest portion of the Casper MPA, including Bar Nunn, is projected to experience significant growth to the year 2030. The extension of fixed-

The environmental justice analysis shows the northwest area as an area that could potentially benefit from transit improvements. In particular, this route could improve access to employment opportunities, shopping, and governmental facilities located in downtown Casper.



### **New Service Area** Airport and Business Park

The Natrona County International Airport and adjacent Business Park, are locations that could potentially benefit from expanded transit service.

This service does present a challenge given the distance between the existing fixed-route service and the airport. The option of providing fixed-route service to the airport could become more attractive if additional development were to occur in the northwest portion of the Casper MPA.

CATC, along with local communities, should continue to monitor the development in this area and evaluate the feasibility of adding this service as a mid-term to long-term transit improvement.



### **New Service Area** Western Portion of MPA

The western portion of the MPA is an area that is expected to experience growth to and beyond the year 2030. The construction of the West Belt Loop could spur development on the western fringe of the MPA. CATC along with the City of Casper and Natrona County should monitor development in these areas and evaluate the need for potential long-term transit service.



### **Transfer Facility**

The current fixed-route service utilizes the gazebo along Beech Street just south of 2nd Street as the current transfer point. This location has many benefits including close proximity to the downtown and other features including direct access to the Casper Rail Trail. The potential conversion of Durbin Street from four-lanes with parking to two-lanes. on-street bicycle lanes, and parking enhances connections between the transfer point and areas to the south including Casper College.

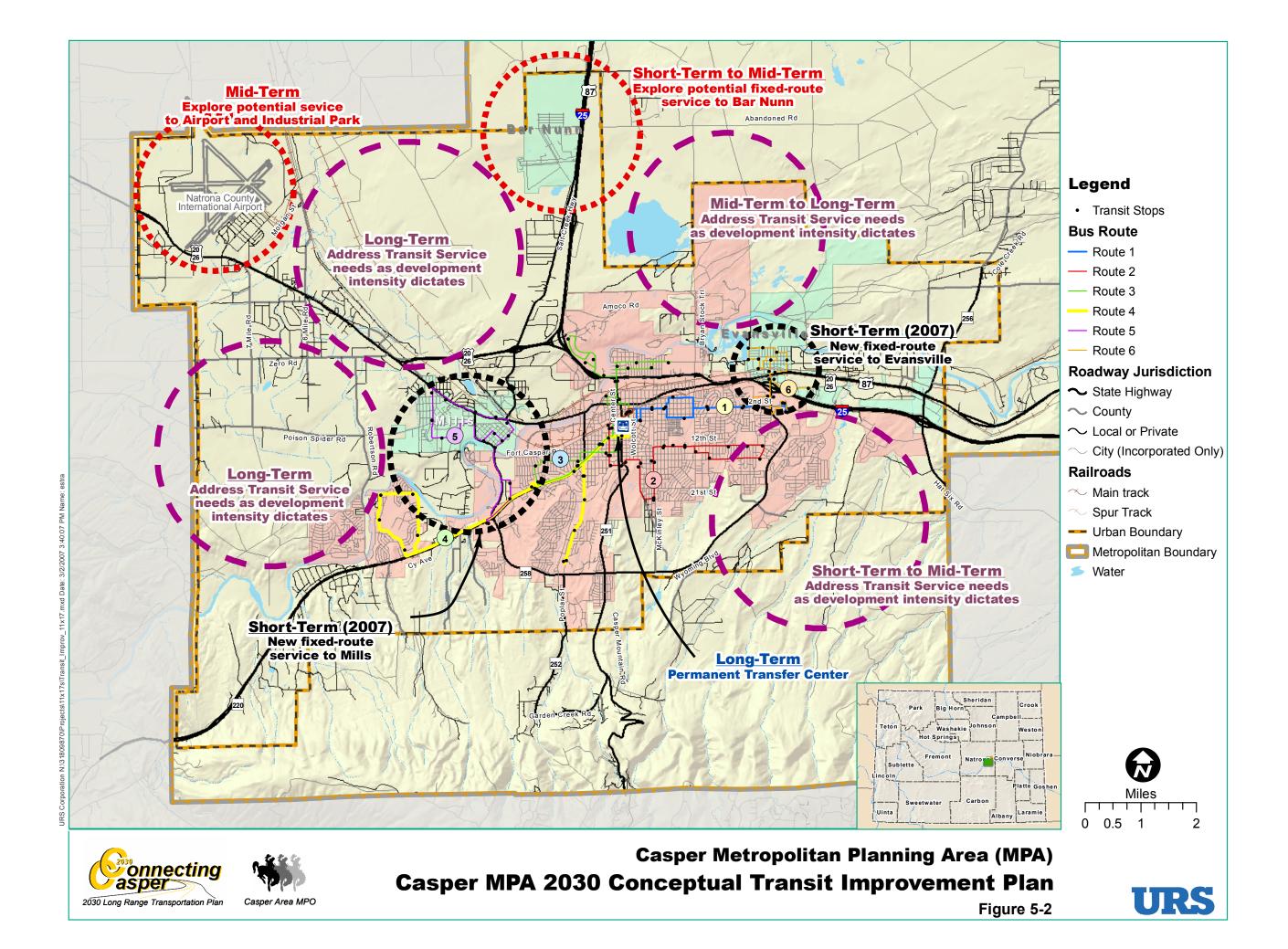
This location could be evaluated as a potential location for a permanent transfer facility.



ON-GOING

The conceptual improvements and the timing are for general planning purposes. Most of the transit improvements identified will be evaluated and potentially implemented as development location and intensity dictates.







### **General Service Improvements**

- 1 Support the expansion of the fixed-route transit services throughout the Casper MPA.
  - Evaluate the potential expansion and/or modification of fixed-route services to developing areas within the MPA to best meet the regional transportation needs.
    - Support the Mills and Evansville fixed-route service set to begin in 2007.
    - Monitor development in the eastern portion of the MPA and evaluate potential service modifications to extend fixed-route service to the area.
    - Evaluate the feasibility of extending fixed-route service to to the northwest portion of the MPA including service to Bar Nunn and Natrona County International Airport and Business Park.
  - **b** Implement additional weekend service and monitor the feasibility of providing longer service hours.
    - Support the implementation of weekend service set to begin in July 2007.
    - ▶ Evaluate the possibility of providing longer service hours.
- Prioritize transportation improvements that promote the use of transit operations throughout the Casper MPA.
  - Support roadway improvements that enhance transit operations.
    - Consider transit operations when making intersection and other roadway improvements along transit corridors.
    - Support improvements that reduce or eliminate travel delays associated with at-grade rail crossings.
    - Evaluate signal preemption along priority transit corridors to reduce travel delays for buses.
  - **(b)** Support non-motorized system improvements that link to regional transit services.
    - Develop a sidewalk maintenance/construction program to improve connections to transit stops.
    - Prioritize trail and other bicycle improvements that link to transit services throughout the Casper MPA.
  - Support projects that improve transit waiting and loading areas.
    - Evaluate existing transit stops to identify potential improvements to increase accessibility for all users.

### Table 5-5. Transit Action Items

# Intermodal Connections ansportation improvements that integrate transit

- 1 Support transportation improvements that integrate transit operations with non-motorized facilities.
- a Evaluate the need for bicycle parking along primary transit routes and at major transit stops.
  - Incorporate bicycle parking at the current transfer location at 2nd Street and Beech Street.
  - Review bicycle and pedestrian connections to the downtown transfer point to determine if improvements are needed.
  - Evaluate existing transit stops serving Casper College and and identify opportunities to enhance connections to regional non-motorized facilities.
- **b** Support the construction of a permanent transfer facility that would be located in downtown Casper.

### **Administrative Issues**

- 1 Encourage participation of surrounding communities in the planning process and explore opportunities to expand transit services beyond existing service boundaries.
  - Work closely with Mills and Evansville to successfully implement the new fixed-route transit service.
  - **b** Evaluate the feasibility of extending fixed-route service to Bar Nunn.
  - Work closely with local community service groups to address the paratransit needs throughout the Casper MPA.
- 2 Continue to identify alternative funding sources to improve transit services throughout the Casper MPA.
  - Work with Casper College to implement a College transit pass program that would encourage student ridership and provide CATC with a reliable revenue source.
- 3 Support the implementation of new technology to enhance safety and security of existing and future transit operations.

### **Land Use and Development Issues**

- 1 Encourage transit oriented development (TOD) principles throughout the Casper MPA to help support the use of public transportation.
  - a Integrate zoning and land use planning to promote transit accessibility to higher density land uses and developments located with the Casper MPA.
  - Local communities should include CATC in the review of major commercial and residential developments to ensure that transit and paratransit needs are addressed.
  - Provide safe, convenient, and comfortable waiting areas at transit stops throughout the Casper MPA. Provide amenities such as shelters, benches, and bicycle parking.
  - d All new development, especially within ¼ mile walking distance of a transit route, should provide sidewalks and curb cuts that comply with the Americans with Disabilities Act (ADA).
- 2 Support transit improvements and programs that connect Casper MPA residents with regional job opportunities.
  - Evaluate and implement service improvements that support economic development.
    - Connect residents to new employment opportunities in developing portions of the Casper MPA.

SOURCE: URS Corporation.



# 5.2.2 Funding

A feasible transit service relies upon secure funding sources and sufficient revenue to support the continuing operation costs and capital improvements. The following evaluates the potential future year Casper MPA transit costs to the year 2030.

# **Operating Costs and Revenues**

Recent operating costs for transit operations (demand response and fixed-route services) have ranged from just under \$1.0 million for FY 2004/05 to the current \$1.4 million for FY 2006/2007. The Bus service began in April 2005 and in FY 2005/06, the first full year of The Bus, the operating costs totaled just over \$1.2 million. Table 5-6 displays the breakdown of transit operating costs for FY 2006/07.

Table 5-6. CATC Operating Budget (FY 2006/07)

		Op	erating Budget	
	CATC		BUS	Total
Administration	\$ 723,430	\$	271,387	\$ 994,817
Contractual Services	\$ 219,936	\$	109,259	\$ 329,195
Preventative Maintenance	\$ 81,500	\$	31,750	\$ 113,250
Total Operating Budget	\$ 1,024,866	\$	412,396	\$ 1,437,262

SOURCE: CATC.

The primary funding sources, or revenues, are provided at the Federal and State levels. In FY 2006/07 the Federal and State share accounted for almost \$800,000. Table 5-7 displays the breakdown of revenues for FY 2006/07.

Table 5-7. CATC Revenues (FY 2006/07)

			Revenue		
	CATC		BUS		Total
Fares	\$ 87,500	\$	35,000	\$	122,500
Interest	\$ 3,000	\$	-	\$	3,000
Subtotal (Ineligible)	\$ 90,500	\$	35,000	\$	125,500
City of Casper	\$ 216,733	\$	139,938	\$	356,671
1% Funds for Weekend Service	\$ 44,000	\$	-	\$	44,000
CDBG Funding	\$ 50,000	\$	39,235	\$	89,235
Evansville	\$ 8,000	\$	-	\$	8,000
Mills	\$ 8,000	\$	-	\$	8,000
Bar Nunn	\$ 1,000	\$	-	\$	1,000
State of Wyoming	\$ 100,000	\$	-	\$	100,000
Natrona County	\$ 15,000	\$	-	\$	15,000
Subtotal (Eligible)	\$ 442,733	\$	179,173	\$	621,906
FTA - 80% Funding	\$ 65,200	\$	25,400	\$	90,600
FTA - 50% Funding	\$ 426,433	\$	172,823	\$	599,256
Subtotal (FTA Funding)	\$ 491,633	\$	198,223	\$	689,856
Total Operating Revenue	\$ 1,024,866	\$	412,396	\$	1,437,262
SOURCE: CATC	C:Documents and Settingslijmeye/A	ly Documen	telCasper LRTP/Transportation Modes/Roadways/(P	cadway Improv	ements_STIP, TIP and future xis@transit projections (%

SOURCE: CATC.



# **Capital Improvements**

Capital improvements, such as vehicle replacement, bus stop amenities, and other expenses (such as computer and office equipment) are other costs that must be considered. Table 5-8 displays the breakdown of capital improvements for FY 2006/07 which totaled \$155,000.

Table 5-8. CATC Capital Improvements (FY 2006/07)

	С	apital I	mprovemen	ts	
	CATC		BUS		Total
<u>Outlays</u>					
2 - Replacement Vans	\$ 120,000	\$	-	\$	120,000
1 - ADA Accessible Bus Stop Shelter	\$ -	\$	15,000	\$	15,000
5 - Bus Stop Benches	\$ -	\$	2,500	\$	2,500
Computer Hardware	\$ 12,000	\$	2,500	\$	14,500
Office Furniture and Equipment	\$ 3,000	\$	-	\$	3,000
Total	\$ 135,000	\$	20,000	\$	155,000
Revenue					
FTA - 80%	\$ 108,000	\$	16,000	\$	124,000
Local - 20%	\$ 27,000	\$	4,000	\$	31,000
Total	\$ 135,000	\$	20,000	\$	155,000

# **Future Year Transit Financial Projections**

To analyze potential future year transit financial conditions, a baseline condition and an expanded transit service scenario were evaluated. It is important to point out that it is extremely difficult to estimate potential funding levels to the year 2030 as there could be significant changes, positive or negative, in funding sources. Uncertain Federal and State budgets, along with increasing fuel costs, are significant obstacles that must be overcome to continue to provide acceptable transit service throughout the Casper MPA.

Given these uncertainties, it was assumed that the operating costs and capital improvement costs would increase at approximately two percent per year to the year 2030. CATC currently replaces two vans per year but with the planned expansion of the fixed-route service to Mills and Evansville in 2007 it is possible that the van replacement could occur less frequently as the demand-response service is likely to decline. As such, it is assumed beginning in FY 2010/11 that the CATC van replacement would occur every two years.

The Bus currently consists of four fixed-routes. Three of these routes use three 26-passenger diesel buses which began operation in April 2005. The Yellow route uses an old 16-passenger CATC bus. The Mills and Evansville routes will also use 16-passenger vans like the CATC buses. It is estimated that the fixed-route vehicles will need to be replaced every five to seven years. For the purpose of the future year baseline conditions, it is assumed that two of the four Casper route vehicles will be replaced in six years and the remaining two replaced in seven years. It is also assumed that the two buses that will be used for the Mills and Evansville routes will be replaced in six years with 26-passenger diesel buses, or a similar type vehicle. Table 5-9 breaks down the future year baseline transit operations to the year 2030.



**Table 5-9. Future Year Baseline Transit Operations** 

			Replacement.	/ New	Vehicles			Replacement / N	lew Vehicles	
Fiscal Year	Operating	٧	ans (CATC)		The Bus	Misc. Costs	Total	Vans (CATC)	The Bus	Comments
2007 / 2008	\$ 1,466,007	\$	122,400	\$	122,400	\$ 20,400	\$ 1,731,207	2	2	2 new vans for The Bus (Mills and Evansville).
2008 / 2009	\$ 1,495,327	\$	124,848			\$ 20,808	\$ 1,640,983	2		
2009 / 2010	\$ 1,525,234	\$	127,345			\$ 21,224	\$ 1,673,803	2		
2010 / 2011	\$ 1,555,739	\$	129,892			\$ 21,649	\$ 1,707,279	2		_
2011 / 2012	\$ 1,586,853	\$	132,490	\$	209,775	\$ 22,082	\$ 1,951,200		2	Replace 2 Casper route buses (6 years old).
2012 / 2013	\$ 1,618,590	\$	135,139	\$	213,971	\$ 22,523	\$ 1,990,224	2	2	Replace 2 Casper route buses (7 years old).
2013 / 2014	\$ 1,650,962	\$	137,842	\$	218,250	\$ 22,974	\$ 2,030,029		2	Replace Mills and Evansville buses.
2014 / 2015	\$ 1,683,982	\$	140,599			\$ 23,433	\$ 1,848,014	2		
2015 / 2016	\$ 1,717,661	\$	143,411			\$ 23,902	\$ 1,884,974			
2016 / 2017	\$ 1,752,014	\$	146,279			\$ 24,380	\$ 1,922,674	2		
2017 / 2018	\$ 1,787,055	\$	149,205	\$	236,241	\$ 24,867	\$ 2,197,368		2	Replace 2 Casper route buses (6 years old).
2018 / 2019	\$ 1,822,796	\$	152,189	\$	240,966	\$ 25,365	\$ 2,241,316	2	2	Replace 2 Casper route buses (7 years old).
2019 / 2020	\$ 1,859,252	\$	155,233	\$	245,785	\$ 25,872	\$ 2,286,142		2	Replace Mills and Evansville Buses.
2020 / 2021	\$ 1,896,437	\$	158,337			\$ 26,390	\$ 2,081,164	2		
2021 / 2022	\$ 1,934,365	\$	161,504			\$ 26,917	\$ 2,122,787			
2022 / 2023	\$ 1,973,053	\$	164,734			\$ 27,456	\$ 2,165,243	2		
2023 / 2024	\$ 2,012,514	\$	168,029	\$	266,046	\$ 28,005	\$ 2,474,593		2	Replace 2 Casper route buses (6 years old).
2024 / 2025	\$ 2,052,764	\$	171,390	\$	271,367	\$ 28,565	\$ 2,524,085	2	2	Replace 2 Casper route buses (7 years old).
2025 / 2026	\$ 2,093,819	\$	174,817	\$	276,794	\$ 29,136	\$ 2,574,567		2	Replace Mills and Evansville Buses.
2026 / 2027	\$ 2,135,696	\$	178,314			\$ 29,719	\$ 2,343,728	2		
2027 / 2028	\$ 2,178,410	\$	181,880			\$ 30,313	\$ 2,390,603			
2028 / 2029	\$ 2,221,978	\$	185,518			\$ 30,920	\$ 2,438,415	2		
2029 / 2030	\$ 2,266,417	\$	189,228	\$	299,611	\$ 31,538	\$ 2,786,794		2	Replace 2 Casper route buses (6 years old).
TOTAL	\$ 42,286,925	\$	3,530,623	\$	2,601,206	\$ 588,437	\$ 49,007,192	26	22	

SOURCE: URS Corporation

NOTES

(1) All expenses assumed to increase at 2% per year

(2) CATC currently replaces 2 vans per year. With the expanded fixed-route service, the van replacement is assumed to occur every other year beginning in FY 2010/11

Based on the assumptions previously mentioned, it is projected that the total operating costs would total approximately \$49.0 million to the year 2030. During this time it is projected that approximately 48 new or replacement vehicles would be purchased. The future year baseline scenario does not assume any significant increase in service with the exception of the planned Mills and Evansville service which could alter projected costs.

A future year expanded transit operations scenario was evaluated to identify potential future year costs. The future year expand transit scenario assumed the addition of fixed-route service to Bar Nunn, the addition of fixed-route service to the northwest portion of the Casper MPA including possible service to the Airport, and the construction of a permanent transfer station. Because of the additional service, it is assumed that operating costs will increase at a higher rate as compared to the future year baseline. To account for this increase, a four percent per year increase was applied to the operating and miscellaneous costs between FY 2010/11 and 2019/20 and a six percent per year increase was applied between FY 2020/21 and 2029/30. Given the expanded transit service, it is also assumed that the CATC van replacement would be needed every three years between FY 2020/21 and 2029/30. No other improvements, such as reducing headways by adding more buses, were factored into the future year expanded transit scenario. Table 5-10 displays the projected costs for this scenario.



**Table 5-10. Future Year Expanded Transit Operations** 

			Replacement.	/ New	Vehicles	Misc. and		Replacement / N	lew Vehicles	
Fiscal Year	Operating	٧	ans (CATC)		The Bus	Other Costs	Total	Vans (CATC)	The Bus	Comments
2007 / 2008	\$ 1,466,007	\$	122,400	\$	122,400	\$ 20,400	\$ 1,731,207	2		2 new vans for The Bus (Mills and Evansville).
2008 / 2009	\$ 1,495,327	\$	124,848			\$ 20,808	\$ 1,640,983	2		
2009 / 2010	\$ 1,525,234	\$	127,345			\$ 21,224	\$ 1,673,803	2		
2010 / 2011	\$ 1,586,243	\$	129,892	\$	102,831	\$ 22,073	\$ 1,841,040	2	1	New bus for service to Bar Nunn.
2011 / 2012	\$ 1,649,693			\$	419,551	\$ 22,956	\$ 2,092,200		2	Replace 2 Casper route buses (6 years old).
2012 / 2013	\$ 1,715,681	\$	135,139			\$ 23,874	\$ 1,874,695	2	2	Replace 2 Casper route buses (7 years old).
2013 / 2014	\$ 1,784,308			\$	218,250	\$ 24,829	\$ 2,027,387		2	Replace Mills and Evansville buses.
2014 / 2015	\$ 1,855,680	\$	140,599			\$ 25,822	\$ 2,022,102	2		
2015 / 2016	\$ 1,929,908					\$ 26,855	\$ 1,956,763			
2016 / 2017	\$ 2,007,104	\$	146,279	\$	115,804	\$ 27,930	\$ 2,297,117	2	1	Replace Bar Nunn bus.
2017 / 2018	\$ 2,087,388			\$	472,482	\$ 29,047	\$ 2,588,917		2	Replace 2 Casper route buses (6 years old).
2018 / 2019	\$ 2,170,883	\$	152,189			\$ 30,209	\$ 2,353,281	2	2	Replace 2 Casper route buses (7 years old).
2019 / 2020	\$ 2,257,719			\$	245,785	\$ 31,417	\$ 2,534,921		2	Replace Mills and Evansville Buses.
2020 / 2021	\$ 2,393,182	\$	158,337	\$	125,350	\$ 33,302	\$ 2,710,171	2	1	New bus for service to NW area / Airport.
2021 / 2022	\$ 2,536,773					\$ 2,035,300	\$ 4,572,073			Includes \$2.0 million for transfer station.
2022 / 2023	\$ 2,688,979	\$	164,734	\$	130,415	\$ 37,418	\$ 3,021,547		1	Replace Bar Nunn bus.
2023 / 2024	\$ 2,850,318			\$	532,092	\$ 39,663	\$ 3,422,073	2	2	Replace 2 Casper route buses (6 years old).
2024 / 2025	\$ 3,021,337	\$	171,390			\$ 42,043	\$ 3,234,770		2	Replace 2 Casper route buses (7 years old).
2025 / 2026	\$ 3,202,617			\$	276,794	\$ 44,566	\$ 3,523,977		2	Replace Mills and Evansville Buses.
2026 / 2027	\$ 3,394,774	\$	178,314	\$	141,165	\$ 47,239	\$ 3,761,492	2	1	Replace NW area / Airport bus.
2027 / 2028	\$ 3,598,461					\$ 50,074	\$ 3,648,535			
2028 / 2029	\$ 3,814,368	\$	185,518	\$	146,868	\$ 53,078	\$ 4,199,832		1	
2029 / 2030	\$ 4,043,231			\$	599,222	\$ 56,263	\$ 4,698,715	2	2	Replace 2 Casper route buses (6 years old).
TOTAL	\$ 55,075,216	\$	1,936,984	\$	3,649,009	\$ 2,766,391	\$ 63,427,600	24	26	

SOURCE: URS

NOTES

Based upon the analysis, it was estimated that the future year expanded transit scenario would total nearly \$63.4 million by the year 2030. This represents an approximately \$14.4 million increase as compared to the future year baseline scenario. Once again it is important to note that several factors need to be considered including the growth/development rate throughout the Casper MPA and the availability of future year funding which will dictate to a large extent the feasibility of expanding the transit service by the year 2030. Finally, this analysis highlights the importance of securing adequate funding to maintain and to continue expand transit operations throughout the Casper MPA.

## **Transit Funding Sources**

The FTA administers the two primary funding programs that are applicable to the transit service in the Casper MPA: Section 5307 Urbanized Area Formula program and Section 5309 Capital Investment program. The FTA also provides additional funding sources targeted at specific transit programs and/or improvements. The following summarizes the major funding sources.

## Section 5307 (Urbanized Area Formula Program)

Section 5307, the Urbanized Area Formula program, makes Federal resources available to urbanized areas for transit capital and operating assistance in urbanized areas and for transportation related planning. For urbanized areas under 200,000 in population, the Section 5307 formula apportionments are based on population and population density. Eligible purposes for Section 5307 funds include:

- Planning, Engineering design and evaluation of transit projects and other technical transportation-related studies;
- Capital investments in bus and bus-related activities such as replacement of buses, overhaul
  of buses, rebuilding of buses, crime prevention and security equipment and construction of

<sup>(1)</sup> Operating and misc. costs assumed to increase 2% per year for FY 2007/08 to 2009/10; 4% per year for FY 2010/11 to 2019/20; and 6% per year for FY 2020/21 to 2030 to reflect inflation and additional services.

(2) CATC currently replaces 2 vans per year. With the expanded fixed-route service, the van replacement is assumed to occur every 2 years between FY 2010/11 and 2019/20 and every 3 years between FY 2020/21 and 2029/30.



maintenance and passenger facilities;

- Operating expenses; and,
- All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

# Section 5309 (Capital Investment Program)

Section 5309, the transit capital investment program, provides capital assistance for three primary activities:

- New and replacement buses and facilities;
- Modernization of existing rail systems; and,
- New fixed guideway systems.

Section 5309 funds, as they relate to the Casper MPA, are used generally for replacement of buses and improving/maintaining existing transit facilities. Eligible purposes for Section 5309 funds, as identified by the FTA, include:

- Acquisition of buses for fleet and service expansion;
- Bus maintenance and administrative facilities:
- Transfer facilities;
- Bus malls:
- Transportation centers;
- Intermodal terminals;
- Park-and-ride stations:
- Acquisition of replacement vehicles;
- Bus rebuilds;
- Bus preventive maintenance:
- Passenger amenities such as passenger shelters and bus stop signs
- Accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fareboxes, computers, shop and garage equipment; and,
- Costs incurred in arranging innovative financing for eligible projects.

# Section 5310 (Transportation for Elderly Persons and Persons with Disabilities)

Section 5310, Transportation for Elderly Persons and Persons with Disabilities, provides authority to the Secretary of Transportation to make grants and loans to state and local governmental authorities to help provide public transportation services that are planned, designed, and carried out to meet the special needs of elderly individuals and individuals with disabilities. Due to the passage of SAFETEA-LU, this is an area currently being updated to reflect changes in legislation.

### Section 5303 (Metropolitan Planning)

Section 5303, Metropolitan Planning program, provides funding to support the cooperative, continuous, and comprehensive planning program for making transportation investment decisions in metropolitan areas. According to the FTA, State DOTs and MPOs may receive funds for purposes that support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency; increasing the safety and security of the transportation system for motorized and non-motorized users; increasing the accessibility and mobility options available to people and for freight; protecting and enhancing the environment, promoting energy conservation, and improving quality of life;



enhancing the integration and connectivity of the transportation system, across and between modes, for people and freight; promoting efficient system management and operation; and emphasizing the preservation of the existing transportation system.

# 5.2.3 Safety and Security

The FTA funds and supports a wide variety of safety and security training to transit agencies. Some options include classroom instruction, train-the-trainer, workshops, conferences and seminars, toolkits, and other training materials. More a more long-term strategy, and more costly, could involve improving on-board equipment to include GPS technology to improve routing and safety as it would be easier to locate transit vehicles in the event of an emergency.



# 5.3 Non-Motorized System Plan

Non-motorized facilities are important components of an overall regional transportation system. Most trips involve some walking and it is important that the Casper MPA support the on-going maintenance of existing non-motorized facilities and identify opportunities to expand the system.

The Casper area is fortunate to have two well maintained multi-use trails – the Platte River Parkway and the Casper Rail Trail. These facilities function as the spine of the non-motorized system. As such, the continued maintenance and enhancement of these trails should be a high priority. Potential opportunities to extend the existing trail system, and to develop connections to the trails, are identified as part of the recommended plan.

The development of multi-use paths also supports pedestrian travel, recreational activities, and encourages bicycle usage. Good walking conditions and safe, convenient bicycle facilities also support the use of public transportation. Together, these transportation modes, services, and facilities support each other and are critical in achieving a pedestrian-friendly, walkable community.

# **5.3.1 Conceptual Non-Motorized Improvements**

The non-motorized system plan identifies potential short-term, mid-term, and long-term improvements to maintain and expand the Casper MPA non-motorized system. Similar to the transit improvements, the timing of the improvements is really dictated by the intensity and location of future year development. As development occurs throughout the Casper MPA, the accommodation of non-motorized system facilities should be considered a high priority.

Given the existing trails already in place – Platte River Parkway and Casper Rail Trail – the top priority for the Casper MPA in the short-term should be to improve connections to the trail system. This includes incorporating system connections between the trails including the use of on-street facilities. One potential on-street facility, along Durbin Street between the Casper Rail Trail and 15<sup>th</sup> Street, would provide an important connection between the Casper downtown and Casper College including other important destinations such as the County Library, YMCA, and the transit transfer point located on Beech Street just south of 2<sup>nd</sup> Street.

The plan also recognizes the importance of improving bicycle and pedestrian access across the I-25 corridor. Existing I-25 interchanges are not designed to adequately accommodate bicyclists and pedestrians and thus create a barrier for non-motorized travel. One potential improvement is along Beverly Street that would connect the Platte River Parkway to the Casper Rail Trail. Another potential connection is near Walsh Drive where a trail could be constructed under I-25.

As a long-term strategy, the non-motorized system should be expanded to developing areas throughout the Casper MPA. Much of this development is projected to occur on fringe areas of the Casper MPA, many of which currently have limited or no non-motorized facilities. As



new development occurs, it is important that local, county, and state agencies review proposed site plans to be sure they adequately accommodate bicyclists and pedestrians. It is also important that bicycle improvements be considered in potential future roadway projects planned for developing areas to help extend the non-motorized system.

Finally, an important component of the plan is that future roadway maintenance, reconstruction, or new construction adequately accommodate bicyclists and pedestrians. Context Sensitive Solutions, as promoted by FHWA, requires that bicycle and pedestrian accommodations be addressed as part of new roadway construction. Routine maintenance, such as repaving roadways, may provide an opportunity to better accommodate bicycle travel by paving and/or widening shoulders. Intersection improvements may also provide an opportunity to more safely accommodate bicyclists and pedestrians.

Table 5-12 and Figure 5-3 display the elements of the Casper MPA 2030 non-motorized system plan. Table 5-13 outlines the non-motorized system implementation while Table 5-14 outlines actions to support the development of the area's non-motorized system plan.

### **Design Standards**

Safety should be the predominate concern in designing any bicycle facility within the Casper MPA. Bicycle crashes are generally the result of motorists failing to yield, motorists turning into the path of a bicyclist, and/or a bicyclist riding on the wrong side of the road. The appropriate bicycle facility and technically sound design are important to developing a safe non-motorized system for all users.

With regard to bicycle facility design and safety, WYDOT has adopted AASHTO highway design standards and bicycle facility design standards outlined in the Guide for the Development of Bicycle Facilities. Local agencies should follow these standards when designing bicycle facilities within the Casper MPA. For general planning purposes, Table 5-11 displays general planning guidelines for bicycle facilities.

Table 5-11. General Bicycle Planning Guidelines

Iak	Die 5-11. Ge	eneral bicycle	Planning C	didelines
		Width o	of Lane / Shoulder	(feet)
Area Type	Design Speed (mph)	ADT < 2,000	DHV 200-400	DHV Over 400
Rural				
	35	11 / 5	11 / 6	11 / 8
	40	11 / 6	11 / 6	11 / 8
	45	11 / 6	11 / 6	11 / 8
	50	11 / 6	11 / 8	12 / 8
	55	12 / 6	12 / 8	12 / 8
Urban				
	25	12 / 2	13 / 2	13 / 3
	30	12 / 2	13 / 3	13 / 3
	35	13 / 3	13 / 3	Bike Lane
	40	13 / 3	Bike Lane	Bike Lane
	45	13 / 4	Bike Lane	Bike Lane
	50	13 / 4 (Bike Lane)	Bike Lane	Bike Lane
	55	NR	NR	NR

SOURCE: Vermont DOT, Oregon DOT, and URS Corporation.

NOTES: 1) Shared use lanes in urban areas may consider bicycle lanes when the distance

is greater than 16'.

2) Values provided are for general planning purposes and are not intended to be a substitute for specific design guidelines established by WYDOT and AASHTO. Each roadway condition should be evaluated on a case by case basis to determine the appropriate bicycle facilities.





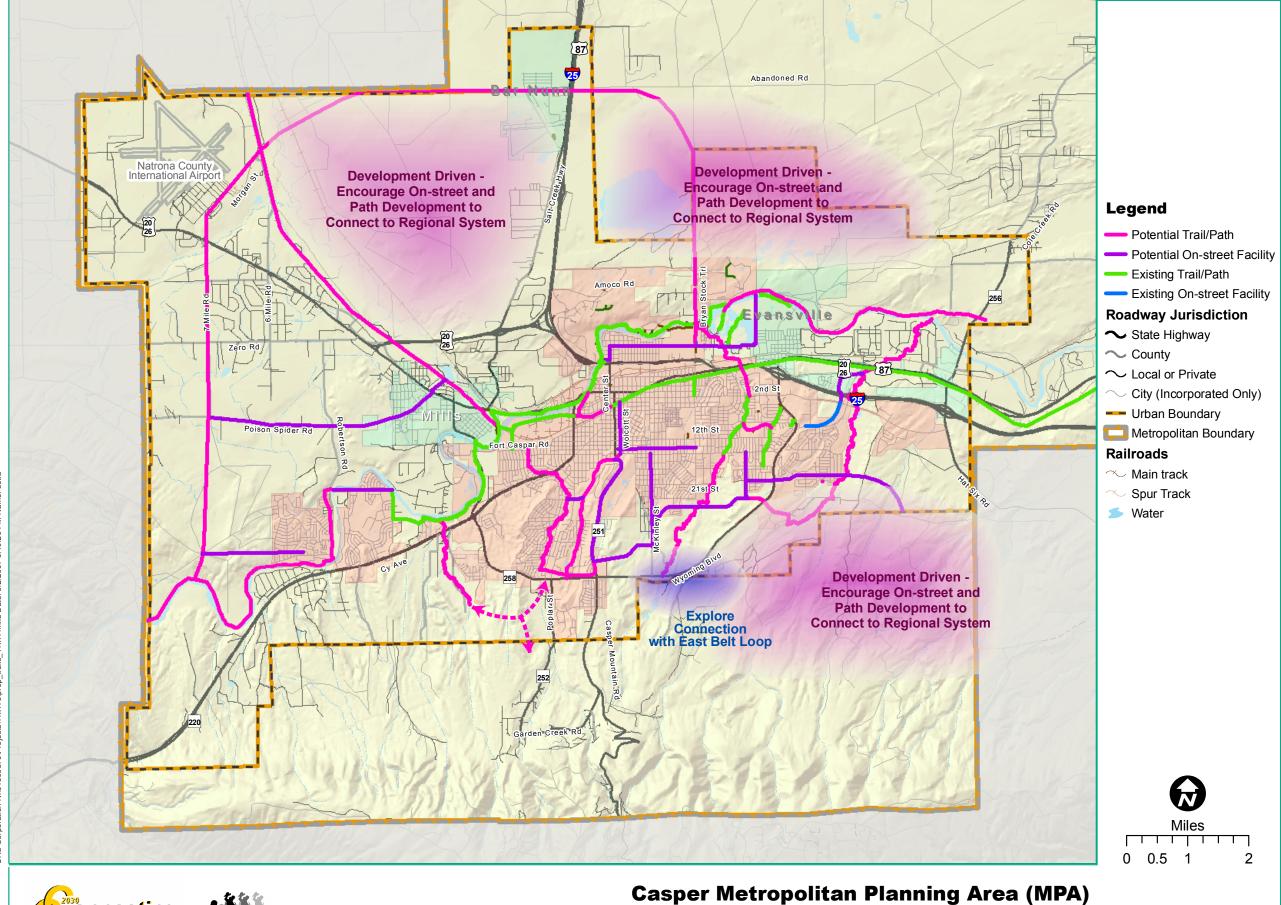
**Table 5-12. Non-Motorized System Improvements** 

		Location		Length	Cost (\$1	,000)
D Project	From	То	Activity	(miles)	Low	Hiç
ails						
l Platte River Parkway	Riverbend Road	Platte River	Potential trail connection to Robertson Road.	0.3	45	9
Platte River Parkway	Riverbend Road extension	just south of Trevett Lane	Potential trail extension along Robertson Road.	1.0	150	30
B Platte River Parkway	Robertson Road	West to MPA Boundary	Potential trail extension to the west.	5.0	750	1,50
Platte River Parkway	Bryan Stock Trail	East to MPA Boundary	Potential trail extension to the east.	6.0	900	1,80
Casper Rail Trail	Center Street	Poplar Street	Potential trail extension to Amoco property.	0.6	90	18
Casper Rail Trail	at Beverly Street	•	Construct approaches to underpass.	0.0	200	4
West Belt Loop / Seven Mile Road Trail	PRP trail extension	US 20 / 26	Potential long-term development of trail.	5.8	870	1,7
Morgan Street	US 20 / 26	McMurry Drive	Potential trail connection or on-street bicycle facility.	3.0	450	9
McMurry Drive	Morgan Street	Bryan Stock Trail extension	Potential trail connection with I-25 interchange accommodations.	5.5	825	1,6
Bryan Stock Trail	McMurry Drive extension	Platte River Parkway Trail	Potential trail or on-street facility.	4.0	600	1,2
Beverly Street / Bryan Stock Trail	Casper Rail Trail	Platte River Parkway Trail	Potential trail connection with I-25 interchange accommodations.	0.8	120	2
2 Sage Creek	15th Street	just north of Wyoming Blvd.	Potential trail extension.	2.1	315	6
3 Sage Creek	2nd Street	K Street	Potential trail extension.	0.7	105	2
4 Elkhorn Creek Trail	Platte River Parkway Trail	Casper Country Club Road	Potential trail development.	2.8	420	8
5 Casper Country Club Road	Elkhorn Creek Trail	Kingsbury Drive	Potential trail connection.	1.0	150	3
6 Wolf Creek Trail	CY Avenue	Wyoming Blvd and south	Potential trail development with connection to Garden Creek	3.5	525	1,0
7 Garden Creek Trail	Fort Caspar Road	Yesness Park	Identify a potential trail alignment.	3.0	n/a	.,,
Sedar Park Trail	Yesness Park	25th Street (Sedar Park)	Potential trail development.	1.7	255	5
		Sedar Park	Evaluate potential trail connection with Casper College.	1.0	150	3
	15th Street					,
Gasper College Trail	15th Street Yellowstone Highway	north to MPA boundary	Monitor corridor for possible rail-to-trail conversion.	7.2	n/a	
9 Casper College Trail				7.2	n/a <b>6,920</b>	13,8
O Casper College Trail D BNSF Rail Line			Monitor corridor for possible rail-to-trail conversion.	7.2		
O Casper College Trail O BNSF Rail Line -Street Facilities			Monitor corridor for possible rail-to-trail conversion.	7.2		
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road	Yellowstone Highway	north to MPA boundary	Monitor corridor for possible rail-to-trail conversion.  SUBTOTAL	7.2 <b>55.0</b>	6,920	
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane	Yellowstone Highway  Paradise Drive	north to MPA boundary  Indian Paintbrush	Monitor corridor for possible rail-to-trail conversion.  SUBTOTAL  Provide on-street bicycle facility to connect to PRP.	7.2 <b>55.0</b> 0.7	<b>6,920</b>	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road	Yellowstone Highway  Paradise Drive PRP trail extension	north to MPA boundary  Indian Paintbrush West Belt Loop extension	Monitor corridor for possible rail-to-trail conversion.  SUBTOTAL  Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension.	7.2 <b>55.0</b> 0.7 1.5	<b>6,920</b> 7 15	<b>13,</b> 8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street	Yellowstone Highway  Paradise Drive PRP trail extension BNSF Rail Line	Indian Paintbrush West Belt Loop extension Seven Mile Road	Monitor corridor for possible rail-to-trail conversion.  SUBTOTAL  Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities.	7.2 <b>55.0</b> 0.7  1.5  4.2	6,920 7 15 42	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road	Yellowstone Highway  Paradise Drive PRP trail extension BNSF Rail Line Center Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road	Monitor corridor for possible rail-to-trail conversion.  SUBTOTAL  Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route.	7.2 <b>55.0</b> 0.7  1.5  4.2  2.2	6,920 7 15 42 11	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route.	7.2 55.0 0.7 1.5 4.2 2.2 0.7	7 15 42 11 4	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9	7 15 42 11 4 17	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8	6,920 7 15 42 11 4 17 n/a	13,4
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PR trail extension 15th Street 31st Street 31st Street Sedar Draw Trail	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3	7 15 42 11 4 17 n/a 9	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street Street Street Street Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street 31st Street	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails. Provide on-street bicycle lanes as part of new roadway.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7	7 15 42 11 4 17 n/a 9 3	13,8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Casper Mountain Road McKinley Street Street Street Street Street Street Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail Casper Mountain Road Durbin Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PR trail extension 15th Street 31st Street 31st Street Sedar Draw Trail McKinley Street	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3 1.0	7 15 42 11 4 17 n/a 9 3 10	<b>13,</b> 8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street J 31st Street 14th Street Farnum Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail Casper Mountain Road	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street 31st Street Sedar Draw Trail McKinley Street McKinley Street Beverly Street	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails. Provide on-street bicycle lanes as part of new roadway. Mark as possible bicycle route. Provide on-street bicycle lanes as part of new roadway. Mark as possible bicycle route. Provide on-street bicycle lanes.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3 1.0 0.5	7 15 42 11 4 17 n/a 9 3 10 3	<b>13,</b> 8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street Street 14th Street Farnum Street Kingsbury Drive	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail Casper Mountain Road Durbin Street McKinley Street 15th Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street 31st Street Sedar Draw Trail McKinley Street McKinley Street Beverly Street Casper Country Club Road	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails. Provide on-street bicycle lanes as part of new roadway. Mark as possible bicycle route. Provide on-street bicycle lanes. Evaluate for on-street bicycle lanes. Evaluate for on-street bicycle lanes.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3 1.0 0.5 0.7 0.7	7 15 42 11 4 17 n/a 9 3 10 3 7	
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street J Street J Street This Street T	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail Casper Mountain Road Durbin Street McKinley Street 15th Street Sage Creek Trail	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street 31st Street Sedar Draw Trail McKinley Street McKinley Street Beverly Street Casper Country Club Road East Belt Loop extension	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails. Provide on-street bicycle lanes as part of new roadway. Mark as possible bicycle route. Provide on-street bicycle lanes. Evaluate for on-street bicycle lanes. Evaluate for on-street bicycle lanes. Evaluate for on-street bicycle lanes.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3 1.0 0.5 0.7	7 15 42 11 4 17 n/a 9 3 10 3 7	13,8
Casper College Trail BNSF Rail Line  -Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street J 25th Street J 31st Street This breet Farnum Street Farnum Street Kingsbury Drive J 21st Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail Casper Mountain Road Durbin Street McKinley Street 15th Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street 31st Street Sedar Draw Trail McKinley Street McKinley Street Beverly Street Casper Country Club Road	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails. Provide on-street bicycle lanes as part of new roadway. Mark as possible bicycle route. Provide on-street bicycle lanes. Evaluate for on-street bicycle lanes. Evaluate for on-street bicycle lanes.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3 1.0 0.5 0.7 0.7 3.5	6,920  7 15 42 11 4 17 n/a 9 3 10 3 7 7 35	<b>13,</b> 8
Casper College Trail BNSF Rail Line  Street Facilities Riverbend Road Trevett Lane Poison Spider Road K Street Platte Park Road Durbin Street Casper Mountain Road McKinley Street Street 14th Street 14th Street Farnum Street Kingsbury Drive 15th Street 25th Street 35th Street 36th Street	Paradise Drive PRP trail extension BNSF Rail Line Center Street K Street Casper Rail Trail 15th Street 14th Street Garden Creek Trail Casper Mountain Road Durbin Street McKinley Street 15th Street Sage Creek Trail McKinley Street	Indian Paintbrush West Belt Loop extension Seven Mile Road Platte Park Road PRP trail extension 15th Street 31st Street 31st Street Sedar Draw Trail McKinley Street McKinley Street Beverly Street Casper Country Club Road East Belt Loop extension Kingsbury Drive	Provide on-street bicycle facility to connect to PRP. Evaluate on-street bicycle lanes as part of roadway extension. Evaluate on-street bicycle facilities. Mark as possible bicycle route. Mark as possible bicycle route. Convert to 2-lane with on-street bicycle lanes. Wide paved shoulders as part of future roadway maintenance. Mark as possible bicycle route. Provide on-street bicycle lanes to connect trails. Provide on-street bicycle lanes as part of new roadway. Mark as possible bicycle route. Provide on-street bicycle lanes. Evaluate for on-street bicycle lanes.	7.2 55.0 0.7 1.5 4.2 2.2 0.7 0.9 1.8 1.7 0.3 1.0 0.5 0.7 0.7 3.5 1.1 0.6	6,920  7 15 42 11 4 17 n/a 9 3 10 3 7 7 35 11	13,4

SOURCE: Local Agencies and URS Corporation.

NOTE: All costs are presented as planning level costs estimates and may not include right-of-way acquisition costs. Also, depending on the construction year, costs may increase.









Casper Metropolitan Planning Area (MPA)
Potential 2030 Non-Motorized System





Table 5-13. Non-Motorized System Implementation

**Short-Term** Mid-Term Long-Term

### Prioritize Connections to Existing Trails

### **On-Street Facilities**

Given the existing trails already in place, the top priority for the Casper MPA in the short-term should be to improve connections to the trail system. This includes developing on-street bicycle facilities to help make these connections. Below is an example of a priority improvement along Durbin Street which converts 4-lanes of traffic to 2-lanes with on-street bicycle lanes.



Existing Conditions along Durbin Street



Potential On-Street Bicvcle Facilities on Durbin Street

### **Beverly Street Underpass**

Seek funding to complete the Beverly Street underpass along the Casper Rail Trail. This crossing would provide a safe, continuous connection of a major nonmotorized trail through and beyond the Casper MPA.

ON-GOING

### **Develop New Non-Motorized Connections**

### Drainage Ways

Drainage ways have been previously used within the Casper MPA for non-motorized travel. Local communities should continue to prioritize drainage ways as a way to provide additional trails and pathways.

### **New Developments**

New developments within the Casper MPA should be viewed as opportunities to continue to build and expand the regional non-motorized system. Local communities should encourage developers to construct sidewalks and bicycle facilities that connect to regional non-motorized facilities.



New developments should look for opportunities to connect to regional facilities such as the Casper Rail Trail shown above.

#### Eliminate Major Barriers

Major barriers that make non-motorized travel difficult should be improved. This includes providing non-motorized accommodations at the I-25 / Beverly Street interchange to develop a potential link between the Platte River Parkway and the Casper Rail Trail.

### **Facility Maintenance**

Local communities along with the Platte River Trust should continue to provide maintenance of the existing non-motorized system.

### **Improved Amenities**

Provide bicycle accommodations such as bicycle parking at major locations in downtown areas. schools, libraries, shopping, and near major transit stops.

### **Identify New Opportunities**

### Platte River Parkway and Casper Rail Trail

Evaluate the feasibility of extending the Platte River Parkway and Casper Rail Trail. While challenges exist, it could be possible to extend the Platte River Parkway to the west and east. The Casper Rail Trail currently extends east beyond the MPA but could potentially extend west from the current terminus at Center Street. This extension could link to paths developed on the old Amoco Site just west of Poplar Street.

#### Fringe Roadways

Expand trail connections to new areas including the north and northwest portions of the Casper MPA. Evaluate potential long-term non-motorized system improvements along McMurry Drive and a potential north-south extension of Bryan Stock Trail.

### New I-25 Interchange (Bar Nunn)

Provide non-motorized accommodations as part of a potential new I-25 interchange in the Bar Nunn area. Non-motorized system attributes should be evaluated in any transportation studies to evaluating roadway needs in the northwest portion of the Casper MPA.

### Transit Linkages

Continue to support the bicycle on buses program and identify potential new opportunities to expand non-motorized improvements to transportation operations within the MPA. Transit Oriented Development is another way to encourage nonmotorized facilities and help promote walkable communities.

#### Rails-to-Trails

While it is unlikely that the BNSF rail line through Casper will shut down, local agencies should continue to monitor the use of this rail line and should be prepared to acquire the right-of-way for a possible rails-to-trails conversion.

### Funding

Encourage the incorporation of non-motorized improvements and other enhancements as part of roadway improvements throughout the MPA. Also, pursue additional funding from programs such as Safe Routes to Schools.

**ON-GOING** 



# Regional Planning

- Continue to maintain, develop, and expand the Casper MPA regional non-motorized transportation system.
  - a Emphasize the continued maintenance and preservation of the existing non-motorized facilities with particular attention given to the Platte River Parkway and Casper Rail Trail.
  - Enhance non-motorized system connections to existing facilities and to developing areas throughout the Casper MPA.
    - Increase the number of on-street bicycle facilities to complement existing trails and improve regional connections.
    - Continue the use of drainage ways to accommodate non-motorized facilities.
    - Monitor the use of rail lines within the Casper MPA to identify potential rails-to-trails opportunities.
  - Continue a proactive planning process that identifies opportunities to implement and construct the recommended improvements.
    - Actively pursue funding to implement and/or construct non-motorized facilities throughout the Casper MPA.
    - Submit grant applications through the Safe Routes to Schools program.
    - Establish a non-motorized MPO sub-committee to help identify, coordinate, and prioritize bicycle improvements throughout the Casper MPA.
    - Continually refine and complete detailed studies of alignments to identify right-of-way and construction costs.
  - Support non-motorized system improvements that enhance or encourage the use of other transportation modes.
    - When appropriate, incorporate bicycle and pedestrian accommodations in the planning, design, and construction of roadway projects within the Casper MPA.
    - ▶ Identify and support bicycle and pedestrian improvements that link to transit stops and transfer facility.

# Table 5-14. Non-Motorized System Action Items

### Safety

- Support improvements that safely and effectively accommodate non-motorized travel within the Casper MPA.
  - Evaluate bicycle and pedestrian accommodations as part of future roadway projects and encourage projects that improve bicycle and pedestrian safety.
    - Provide paved shoulders along high use bicycle corridors.
    - Clearly designate on-street bicycle routes and lanes to prioritize alternative transportation modes.
    - Maintain and repair sidewalks within the Casper MPA with special attention near schools and transit stops.
  - Support improvements/projects that eliminate or minimize barriers and provide safe, convenient linkages to major destinations. Specific projects include:
    - Complete the Beverly Street underpass along the Casper Rail Trail.
    - Incorporate bicycle and pedestrian facilities at Beverly Street / I-25 interchange to develop a connection between the Platte River Parkway and Casper Rail Trail.
    - Incorporate bicycle and pedestrian facilities as part of a potential new I-25 interchange near Bar Nunn.
    - Evaluate an extension of the Casper Rail Trail to the west including a connection across Poplar Street.
    - Evaluate permanent traffic calming devices along 12th and 13th Street, between CY Avenue and McKinley Street, to slow traffic and ultimately improve pedestrian and bicycling conditions.
  - **©** Emphasize a Safe Routes to School program that prioritizes bicycle and pedestrian improvements near schools.
    - Conduct a survey of elementary schools to help identify non-motorized system deficiencies.
    - Evaluate existing non-motorized facilities near schools including sidewalk condition, crosswalks, presence of traffic control devices, traffic volumes, posted speed limits, and observed speed limits.
    - Map appropriate routes for non-motorized travel to schools throughout the Casper MPA.

### **System Enhancements**

- Support land use and policy decisions that prioritize the use of non-motorized transportation within the Casper MPA.
  - Local agencies should adopt polices that emphasize and promote bicycle and pedestrian travel.
    - Incorporate standards, as part of comprehensive plan updates and other studies, that promote bicycle and pedestrian travel.
    - Prioritize and maintain/upgrade bicycle and pedestrian facilities that connect to local transit stops.
    - Incorporate policies that set aside right-of-way to enable future year bicycle improvements to be implemented.
  - New developments should be required to address nonmotorized facilities to identify improvements that would strengthen both local and regional connections.
    - New residential development should evaluate accessibility to existing and planned non-motorized improvements and should identify opportunities to enhance these connections.
    - New commercial development should provide adequate bicycle parking and appropriate transit accommodations and amenities.
    - Amend or adopt policies that require developers to provide non-motorized facilities including amenities such as bicycle parking at major destinations such as downtowns, parks, libraries, and schools.
  - Apply Context Sensitive Solutions (CSS) to roadway improvements throughout the Casper MPA. CSS principles could potentially support and encourage non-motorized travel within the region.
  - Evaluate non-motorized accommodations as part of the priority roadway improvements identified for the Casper MPA.
    - Review bicycle compatibility to determine the most appropriate bicycle accommodations including multi-use paths/trails, on-street bicycle lanes, or on-street bicycle routes
    - Emphasize non-motorized improvements that eliminate or minimize potential barriers including crossing at major roadways, intersections, and interchanges.

SOURCE: URS Corporation.



# 5.3.2 Funding

Non-motorized improvements are often incorporated into roadway maintenance and new construction. Non-motorized system improvements generally fall into on-system enhancements which occur with roadway improvements and off-system enhancements that are used to improve dedicated non-motorized facilities, such as the Casper Rail Trail. The following are examples of funding sources that can be used for bicycle enhancements.

### **Transportation Enhancements Program**

Transportation enhancements are transportation-related projects designed to strengthen the cultural, aesthetic and environmental aspects of the intermodal transportation system. The transportation enhancements program provides for the implementation of a variety of projects including bicycle and pedestrian pathway facilities. Funding is available through the Transportation Enhancement Activities Local (TEAL) grant funding. The TEAL Application process generally occurs annually between April and May with an end of June deadline.

### Safe Routes to School

The Safe Routes to School program was added as part of the new Federal transportation legislation, SAFETEA-LU. Wyoming is expected to receive approximately \$1.0 million annually during the SAFETEA-LU program. This program is funded based on a competitive grant application process with the first round of applications set for Spring 2007.

Two types of funds are available as part of the Safe Routes to School program. The first is for infrastructure projects (engineering improvements) and the second is for non-infrastructure related activities (such as education, enforcement and encouragement programs).

## **Surface Transportation Program (STP)**

Some STP funding can be used for bicycle and pedestrian projects including sidewalk improvements designed to comply with the Americans with Disabilities Act.

# **Recreational Trails Program**

The Recreational Trails Program (RTP) includes Federal transportation funds that benefit recreation. Funds are made available to the States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses.

### **Hazard Elimination Program**

The Hazard Elimination program is a possible source of funding to improve safety for bicyclists and pedestrians. The definition of a "public road" includes publicly-owned pathways and trails.

### National Highway System (NHS)

Some bicycle and pedestrian system improvements, that impact interstate highway corridors, are eligible for funding under the NHS program.



# 5.4 Rail Plan

The State of Wyoming, much like the entire nation, is expected to see an increase in the amount of freight and rail over the next twenty-five years. Much of the rail activity currently, and planned, in Wyoming takes place south and east of the Casper MPA. The Casper MPA is not expected to experience significant increases in rail activity over the next twenty-five years. Even so, it is important for the Casper MPA to continue to maintain active rail lines through the MPA and to prioritize safety for at-grade rail crossings.

Opportunities to minimize or eliminate potential modal conflicts should be considered throughout the MPA. At-grade rail crossings should be closely monitored to determine if traffic control devices, or improved traffic control devices, are needed. New technology, such as quad system gates that completely prohibit motorists from crossing the train tracks when the gates are activated, could be considered at high priority crossings to increase travel safety. Table 5-15 summarizes the railroad action items for the Casper MPA.

# **Rail Funding Sources**

Funding for rail and freight facilities comes primarily from private sources. It is possible that some highway funds could be used to construct grade separated facilities to help reduce potential modal conflicts and reduce travel delays caused by at-grade crossings. Railroads will often participate, including funding, in the construction of grade separations as this eliminates maintenance costs associated with warning devices and reduces potential liability. With the growing emphasis on freight movement, it is important that adequate funding be obtained to provide on-going maintenance and other rail improvements between now and the year 2030.

The Surface Transportation Rail Crossing Program is a federally-funded program which assists in the upgrading, modification and improvement of public railroad grade crossings. The purpose of this program is to improve safety of at-grade crossings in both rural and urban locations. Upgrades include such items as electronic signalization improvements for rail track crossings on public roads and streets. WYDOT is responsible for the administration of the STP-R program. However, the affected railroad company is the contractor for the actual construction work. WYDOT enters into STP-R project agreements with both the sponsoring local entity and the railroad company.

# 5.5 Aviation Plan

The LRTP recommends the continued support, development, and operation of the Natrona County International Airport. Roadway improvements, such as the West Belt Loop and the McMurry Drive extension, are projects that would improve access to the Airport and the adjacent business park. The possible extension of transit services to the Airport and Business Park are other transportation improvements that would support the continued growth and success of the NCIA. With future updates of the LRTP it is important to reevaluate and address the aviation needs within the Casper MPA. Table 5-15 summarizes the aviation action items for the Casper MPA.

# **C**<sup>203</sup>

### **Railroad Operations**

- 1 Provide safe at-grade rail crossings at all locations throughout the Casper MPA.
  - Monitor at-grade rail crossings within the Casper MPA to provide a high level of safety and mobility for motorists, buses, bicyclists and pedestrians.
  - b Identify high priority crossings that could be considered for new or improved traffic control devices or grade separation.
  - Evaluate new technologies that improve at-grade rail crossings including the installation of four-quad gate systems to improve traffic safety for all transportation users.
  - Support the continued routine maintenance and upkeep of the existing rail infrastructure.
  - Coordinate rail improvements with rail companies to minimize the potential impact on area residents and businesses.
- Minimize at-grade rail crossing delays within the Casper MPA to ensure a high level of mobility for motorists, buses, bicyclists, pedestrians, and freight traffic.
  - a Evaluate potential locations for possible grade-separated facilities to eliminate travel delays and potential modal conflicts.
- Monitor and preserve abandoned rail corridors that could be converted to a rails-to-trails facility, similar to the Casper Rail Trail facility.
- 4 Support the planning and feasibility analysis of high speed rail that would link the Casper Area with Denver, CO and Albuquerque, NM.

### Table 5-15. Rail and Aviation Action Items

### **Aviation Operations**

- Support the continued growth and development of the Natrona County International Airport.
  - a Review current and planned land use and zoning near the airport to ensure that development does not negatively impact airport operations.
  - Support the implementation of the current and future Airport Master Plan.
  - Support the on-going maintenance of the airport facilities to continue to provide safe and convenient private and commercial airline service to Casper MPA businesses and residents.
- 2 Support roadway projects that improve regional and local access to the Natrona County International Airport.
  - a Prioritize the West Belt Loop as a project that will increase accessibility to the Airport and Business Park.
  - Support the development of local and regional transportation infrastructure in the northwest portion of the Casper MPA including the construction of McMurry Drive.

SOURCE: URS Corporation.